



# VOLCANO

HYDRONIC UNIT HEATER

2022



# VOLCANO

WORLD'S FIRST CHOICE  
HYDRONIC UNIT HEATER



Volcano combines innovative technical solutions with a modern and functional design. We precisely engineer each component to achieve „The Function“, and we also strive for „The Form“, a form that is neglected on the segment.

We were capable of conceptualizing a diamond, simplicity, strength, and beauty were the key concepts that we used, allowing us to create a contemporary and functional cover design.

The volcano is the 1st Engineer/Design Unit heater in the market with the IF design award in 2017

## Modernity

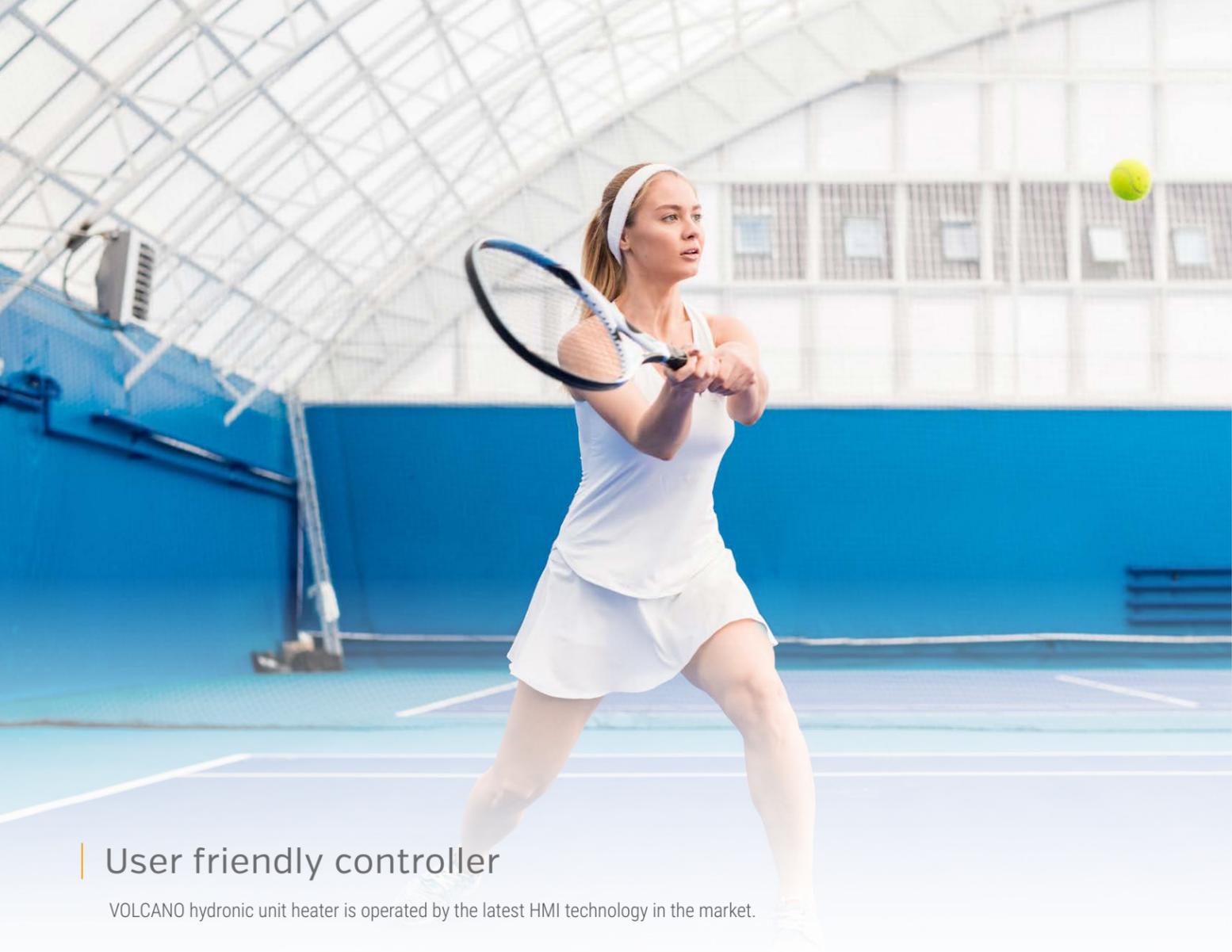
- » ABS casing is characterized by high mechanical strength
- » Durable colour thanks to **anti-UV** pigment mixture
- » Resistance to high temperatures
- » Unique design awarded with **IF Design**
- » Failure-free proven by **3 year warranty**

## High performance

- » Casing design allows the Hydronic Coil face area to be fully functional
- » Volcanos are equipped with 1R, 2R, or 3R hydronic coils
- » Effective work with low temperature medium ex. heating pump
- » Louvers can be independently adjusted by hand
- » Louvers profile provides minimal airflow resistance.

## Energy efficiency

- » All of our units are equipped with **ultra-Premium Efficiency EC motors**
- » Performance efficiency is guaranteed, even at low speeds
- » Smooth programmable speed regulation
- » Volcano fan design + ECM can save up to 40% of energy



## User friendly controller

VOLCANO hydronic unit heater is operated by the latest HMI technology in the market.



Volcano HMI Controller allows the end-user to have complete control at the touch of a finger. A friendly user interface, room temperature display, schedules and more can be programmed for daily use and energy savings. BMS compatible, with the flexibility to connect one HMI to up to eight units at the same time, makes the VOLCANO HMI controller one of the best in the market.

## Product range



### VOLCANO

	VR Mini	VR-D Mini	VR1	VR2	VR3	VR-D
Heating power range	10-71 MBH	-	17-106 MBH	27-175 MBH	44-261 MBH	-
Maximum air output	1236 CFM	1371 CFM	3119 CFM	2855 CFM	3355 CFM	3826 CFM
Horizontal range (max.)	46 ft	52 ft	75 ft	72 ft	82 ft	92 ft
Vertical range (max.)	26 ft	32 ft	39 ft	36 ft	39 ft	49 ft

The above parameters refer to 240V/1pH/60Hz power supply

## Technical parameters

MODEL	VTS article No.	Power supply (V/ph/Hz)	Heating power range (MBH)*	Air volume (CFM)	Maximum horizontal air range (ft)	Maximum vertical air range (ft)	Motor power (hp)	Rated current (A)	Rated motor rotation speed (RPM)
<b>VOLCANO VR Mini</b>	1-4-0101-0481	240/1/60	10-71	1236	46	26	0.12	0.6	1200
		115/1/60	8-63	978	35	20			
<b>VOLCANO VR1</b>	1-4-0101-0488	240/1/60	17-106	3119	75	39	0.34	1.3	1430
		115/1/60	8-78	1827	48	25			
<b>VOLCANO VR2</b>	1-4-0101-0489	240/1/60	27-175	2855	72	36	0.34	1.3	1430
		115/1/60	19-131	1795	48	24			
<b>VOLCANO VR3</b>	1-4-0101-0484	240/1/60	44-261	3355	82	39	0.5	1.6	1400
		115/1/60	33-214	2391	55	26			
<b>VOLCANO VR-D Mini</b>	1-4-0101-0546	240/1/60	---	1371	52	32	0.12	0.6	1200
		115/1/60	---	1085	35	21			
<b>VOLCANO VR-D</b>	1-4-0101-0485	240/1/60	---	3826	92	49	0.5	1.6	1400
		115/1/60	---	2727	61	33			

\* The upper heating capacity range is specified for the following conditions: Heating medium temperature EWT = 200°F, LWT = 160°F and for air temperature EAT = 32°F

### PIPELINE DIAMETERS\*

Number of heaters connected to the main line**	VR Mini		VR1		VR2		VR3	
	Max water flow [GPM]	Pipeline diameter ["]	Max water flow [GPM]	Pipeline diameter ["]	Max water flow [GPM]	Pipeline diameter ["]	Max water flow [GPM]	Pipeline diameter ["]
1	0.5	¾	0.8	¾	1.3	¾	1.9	¾
2	1.1	¾	2.6	¾	2.6	1	3.9	1¼
3	1.6	1	3.6	1	3.6	1¼	5.8	1½
4	2.2	1	5.2	1	5.2	1¼	7.8	1½
5	2.7	1	6.5	1¼	6.5	1½	9.8	2
6	3.2	1¼	7.8	1¼	7.8	1½	11.7	2
7	3.8	1¼	9.1	1¼	9.1	2	13.7	2½
8	4.4	1¼	10.4	1½	10.4	2	15.6	2½
9	4.9	1¼	11.7	1½	11.7	2	17.5	2½
10	5.4	1¼	13	1½	13	2½	19.5	3

\* Pipeline diameters selected for maximum water flow rate up to 8 ft/s

\*\* Heaters connected successively to one main line

# Controls

## HMI VOLCANO controller



### Parameters

Model		
VTS product number		1-4-2801-0222
Motor support		EC
Power supply voltage	V/ph/Hz	115-240/1/60
Permissible load current	A	1A for 240 V AC 0,02A for 0-10V
Settings range	°F	41...104
Work mode	---	manual/automatic
Hourly-weekly calendar	---	Yes
Clock	---	Yes
Temperature measurement	°F	32...122
The possibility of connecting a separate temperature sensor	pcs.	1 or 4
BMS	---	Modbus RTU RS485
Protection rate	IP	20

# Accessories



Valve with actuator

VTS article No.		1-2-1204-2019
power supply voltage	V/ph/Hz	240/1/60
Power consumption electrical	W	1
connection	"	3/4
Coefficient of Volume	-	4,5
opening/ closing time	min.	3/3
protection rating	IP	54



Room NTC sensor (for the VOLCANO controller)

VTS article No.		1-2-1205-0007
resistance measurement element	kΩ	NTC 10K
assembly	---	wall-mounted
max. signal wire length	ft	300
ambient	°F	-4...+150
protection rating	IP	66



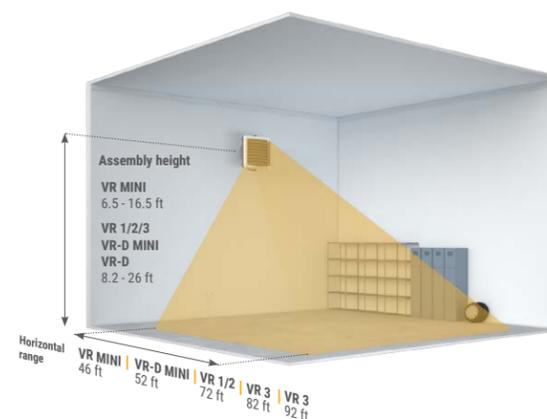
Flex. connecting hoses (set)

VTS article No.		1-2-2702-0076
length (stretchable)	in	24-35
connection type	GW/GW	3/4"
max. fluid pressure	psi	232
min. working temperature for water	°F	41
min. working temperature for glycol	°F	-4
max. working temperature	°F	200
set includes		hose (2 pcs) gasket (4 pcs)



# Assembly

## ASSEMBLY WALL

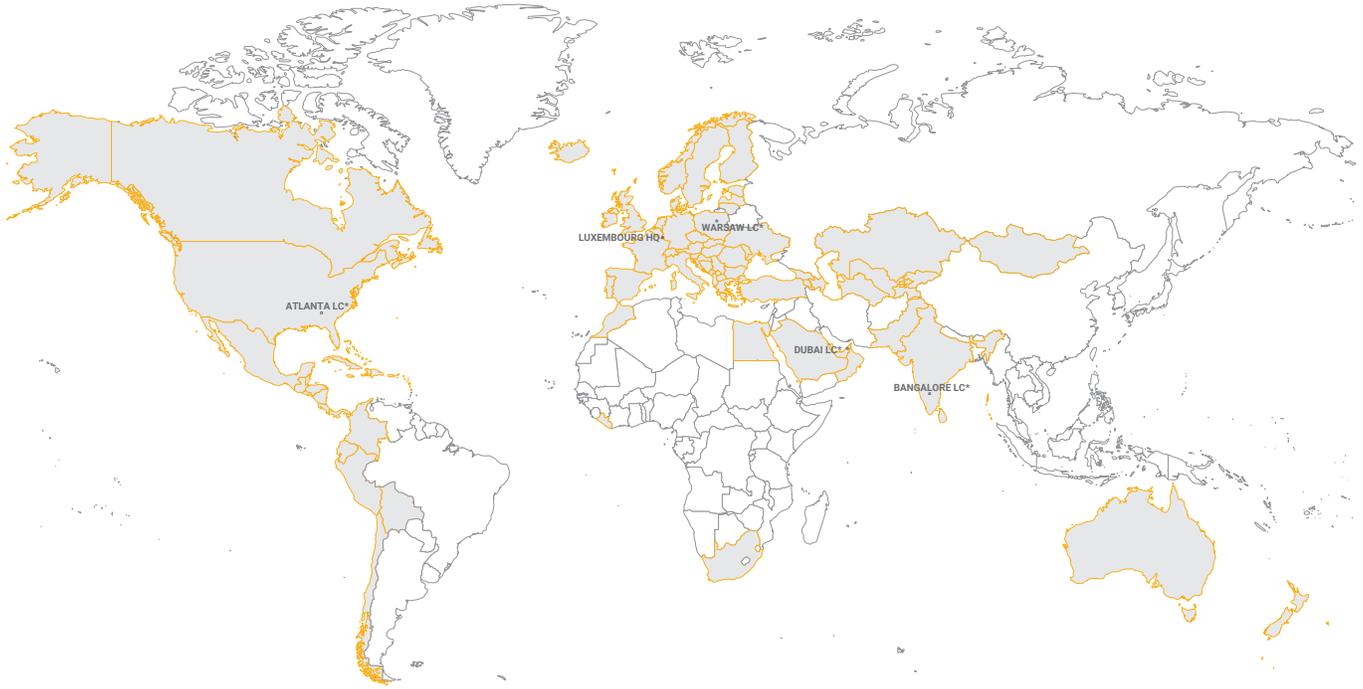


## ASSEMBLY CEILING





Worlds hydronic heaters  
sales leader



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The features mentioned are subject to continuous upgrades and can change any time.  
VTS assuring continuous improvement for products and data and reserves the right to change design and specifications without notice.